The germanium point contact ( Ge ) diodes are widely used for detecting the rectifying efficiency or for switching on the radio, TV, or stereo, ect.

## FEATURE

* High reliability for resistance to vibration and shock proof.
* High withstand voltage.
* Small reverse current.
* Excellent electrical characteristics suitable for FM. detection or MPX.


## APPLICATION

* FM detection, MPX, projected-image detection. switching, and limiter.


## Absolute Maximum Ratings

|  | Symbol | Value | Unit |
| :--- | :--- | :--- | :---: |
| Peak Reverse Voltage | $\mathrm{V}_{\mathrm{RM}}$ | 45 | V |
| Reverse Voltage dc | $\mathrm{V}_{\mathrm{R}}$ | 20 | V |
| Peak Forward Current | $\mathrm{I}_{\mathrm{FM}}$ | 150 | mA |
| Average Rectified Output Current | $\mathrm{I}_{0}$ | 50 | mA |
| Surge Forward Current | $\mathrm{I}_{\text {surge }}$ | 500 | mA |
| Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | 75 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{S}}$ | -55 to +75 | ${ }^{\circ} \mathrm{C}$ |

Characteristics (1N34A)

|  | Symbol | Test condition ( $\mathrm{T}_{\mathrm{a}} 25 \pm 2^{\circ} \mathrm{C}$ ) | Min. | Typ. | Max. | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forward Current | $\mathrm{I}_{\mathrm{F}}$ | $\mathrm{V}_{\mathrm{F}}=1 \mathrm{~V}$ | 4 | 2 | - | mA |
| Reverse Currents | $\mathrm{I}_{\text {H }}$ | $\mathrm{V}_{\mathrm{R}}=-10 \mathrm{~V}$ | - | - | 100 | $\mu \mathrm{A}$ |
|  | $\mathrm{I}_{\mathrm{R} 2}$ | $\mathrm{V}_{\mathrm{R}}=\mathrm{V}$ | - | - | - | $\mu \mathrm{A}$ |
| Junction Capacitance $\mathrm{C}_{\mathrm{i}}$ | - | $\mathrm{f}=1 \mathrm{MHz}, \mathrm{V}=-1 \mathrm{~V}$ | - | - | 1 | PF |
| Rectification efficiency | H | $\begin{aligned} & \mathrm{Vi}=2 \mathrm{Vrms},=5 \mathrm{~K} \Omega \\ & \mathrm{C}=20 \mathrm{PF}, \mathrm{f}=40 \mathrm{MHz} \end{aligned}$ | 55 | - | - | \% |
| Pair |  |  |  |  |  |  |

